

CLAIMS

1. An autonomous device (4) for blanking out the light radiation emitted by at least one star (1), where the device  
5 (4) includes means (43) designed to control propulsion means (44) which themselves are designed to move or stop the device (4) in space and/or in a pseudo-orbit in space around an observation telescope (2) that includes an observation  
10 screen (40), with the control means (43) of the propulsion means (44) also being designed to position the screen (40) on a line of sight (3) between the telescope (2) and the star (1) during a period of observation, so that the light radiation from the star (1) is at least partially blanked from the  
15 observation aperture (21) of the telescope (2) during the said observation period.

2. A device according to claim 1, characterised in that one blanking dimension (41) of the screen (40) is of the order  
20 of magnitude of the observation aperture (21) of the telescope (2).

3. A device according to either of claims 1 or 2, characterised in that the screen (40) is flexible and/or  
25 articulated.

4. A device according to claim 3, characterised in that the screen includes means (42) designed to deploy or fold the screen (40).  
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5. A device according to one of claims 1 to 4, characterised in that it includes means (45) designed to move the screen (40) in relation to the device (4) in order to modify the degree of blanking of the light from the star (1)  
35 in relation to the observation aperture (21) of the telescope (2).

6. A device according to one of claims 1 to 5, characterised in that it also includes reflectors (46) of a laser signal, or radio responders, for positioning the device (4).

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7. A device according to one of claims 1 to 6, characterised in that the propulsion means (44) are also designed to position the device (4) in a pseudo-orbit around the telescope (2).

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8. An assembly that includes an observation telescope (2) which includes an observation aperture (21) characterised in that it includes at least one device (4) according to one of claims 1 to 7.

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9. An assembly according to claim 8, characterised in that the telescope (2) includes reflectors (26) of a laser signal or radio responders for positioning the telescope (2).

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10. A method for at least partial blanking of the light radiation emitted by at least one star (1) from the observation aperture (21) of an observation telescope (2) in space, where the blanking occurs during a period of observation, characterised in that it includes steps in which control is exercised over means (43) that are designed to control the propulsion means (44) of at least one autonomous blanking device (4) in a pseudo-orbit in space around the telescope (2) in order to position a screen (40) of the device (4) on the line of sight (3) between the telescope (2) and the star (1) during the said observation period.

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11. A method according to claim 10, characterised in that the position of the blanking device (4) and of the telescope (2) are determined by means of at least one radio or laser burst.

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12. A method according to either of claims 10 or 11, characterised in that, in order to modify the degree of blanking of the light from the star (1) in relation to the observation aperture (21) of the telescope (2), means (45) are  
5 employed to move the screen (40) in relation to the device (4).